

WHAT IS CLAIMED IS:

1. A device comprising:
a textile substrate having a first surface;
5 a coating on the first surface of said textile substrate, said coating including a multiphase fluorochemical, an organic cationic material having at least two carbon atoms, and a sorbant polymer.
- 10 2. The device according to Claim 1, wherein the multiphase fluorochemical comprises a dual action fluorochemical having a first phase of a hydrophobic state in a first condition, and a second phase of a hydrophilic state in a second condition.
- 15 3. The device according to Claim 1, wherein the multiphase fluorochemical comprises a block copolymer with a fluorine containing hydrophobic segment and a hydrophilic segment.
- 20 4. The device according to Claim 3, wherein the block copolymer comprises an acrylate which contains the hydrophobic and hydrophilic segments.
- 25 5. The device according to Claim 3, wherein the block copolymer comprises a urethane which contains the hydrophobic and hydrophilic segments.
6. The device according to Claim 1, wherein the organic cationic material comprises a polymeric cationic material

7. The device according to Claim 1, wherein the organic cationic material comprises a nonpolymeric organic cationic material

8. The device according to Claim 1, wherein the organic cationic material comprises nitrogen-containing material.

9. The device according to Claim 1, wherein the organic cationic material comprises a phosphorus-containing material.

10. The device according to Claim 1, wherein the organic cationic material comprises a material selected from the group consisting of: primary amines, secondary amines, tertiary amines, quaternary amines, and amines converted to cationic amines under acidic conditions.

11. The device according to Claim 1, wherein the sorbant polymer comprises a synthetic polymer.

12. The device according to Claim 1, wherein the sorbant polymer comprises a natural polymer.

13. The device according to Claim 1, wherein said textile comprises a woven fabric.

14. The device according to Claim 1, wherein said textile comprises a knit fabric.

15. The device according to Claim 1, wherein said textile comprises a nonwoven material.

16. The device according to Claim 1, wherein said textile comprises a pile material.

17. The device according to Claim 1, further including an image disposed on the first surface of said textile having the coating thereon.

18. The device according to Claim 15, wherein the image disposed on said textile comprises a colorant selected from the group consisting of: dyes, pigments, and polymeric colorants.

19. A device comprising:
a textile substrate having a first surface;
a coating on the first surface of said textile substrate, said coating including a multiphase fluorochemical, an organic cationic material having at least two carbon atoms, and a sorbant polymer, wherein the multiphase fluorochemical is present on the textile in an amount ranging from about 0.01 to about 15 dry weight percent on the weight of the textile.

20. A device comprising:
a textile substrate having a first surface;
a coating on the first surface of said textile substrate, said coating including a multiphase fluorochemical, an organic cationic material having at least two carbon atoms, and a sorbant polymer, wherein the multiphase fluorochemical is present on the textile in an amount ranging from about 0.1 to about 5 dry weight percent on the weight of the textile.

21. A device comprising:
a textile substrate having a first surface;

5 a coating on the first surface of said textile substrate, said coating including a multiphase fluorochemical, an organic cationic material having at least two carbon atoms, and a sorbant polymer, wherein the organic cationic material is present on the textile in an amount ranging from about 0.005 to about 35 dry weight percent on the weight of the textile.

10 22. A device comprising:
a textile substrate having a first surface;
a coating on the first surface of said textile substrate, said coating including a multiphase fluorochemical, an organic cationic material having at least two carbon atoms, and a sorbant polymer, wherein the organic cationic material is present on the textile in an amount ranging from about 0.01 to about 15 dry weight percent on the weight of the textile.

20 23. A device comprising:
a textile substrate having a first surface;
a coating on the first surface of said textile substrate, said coating including a multiphase fluorochemical, an organic cationic material having at least two carbon atoms, and a sorbant polymer, wherein the sorbant polymer is present on the textile in an amount ranging from about 0.01 to about 60 dry weight percent on the weight of the textile.

25 24. A device comprising:
a textile substrate having a first surface;
a coating on the first surface of said textile substrate, said coating including a multiphase fluorochemical, an organic cationic material having at least two carbon atoms, and a sorbant

30

Inventor: Cates et al.
Express Mail Label No. EL825877113US

US PTO Customer No. 25280
Case No. 5339

polymer, wherein the sorbant polymer is present on the textile in an amount ranging from about 0.1 to about 10 dry weight percent on the weight of the textile.

5

10044156-102201